

REMARKS

In response to the Office Action mailed April 13, 2006, Applicant submits the following amendment and remarks and requests reconsideration thereof. In this response, Applicant amends claims 9, 14, 15, and 22. Currently, claims 1-28 are pending. Applicant submits that no new matter is added by these amendments.

1. Claims 1-20, 22-26, and 28 Rejected Under 35 U.S.C. §102

The Examiner rejects claims 1-20, 22-26, and 28 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,923,047 to Chia et al. ("*Chia*"). To anticipate a claim, the relied upon reference must disclose every element of the rejected claim. *MPEP §2131*.

Claim 1 as currently pending recites a method for forming a die, the method comprising forming a die on a wafer, said die having an active portion comprising integrated circuitry, wherein said die has at least one input bond pad formed on said active portion, forming at least one test pad on said die, and forming a conductive path between said at least one input bond pad and said at least one test pad, wherein a portion of said conductive path is formed on said die between an edge of said die and said active portion of said die. Claim 1 includes the element of forming at least one test pad on said die.

Applicant respectfully notes to the Examiner that test pads 20 disclosed by *Chia* are not formed or disposed on the die, but rather that they are located between the die as shown in Figs. 1-2. *Chia* explicitly states that "two rows of test pads are spaced at twice the pitch of the bond pads between two adjacent dice..." See column 1, lines 57-58. *Chia* then discloses that "...providing a plurality of test pads in the scribe space between the individual die as illustrated in Fig. 2" and "In one embodiment of the invention, test pads 20 are linearly aligned along a

center line 22 in the scribe space between die 12A and die 12B". See column 2, lines 30-36. Finally, *Chia* states "...first and second pluralities of test pads 20 are aligned along two center lines 24, 26 between dice 12A and 12C." See column 2, lines 45-47.

Fig. 2 further supports Applicant's position that the testing pads disclosed by *Chia* are located between the die, not on the die as claimed by Applicant. Specifically, Fig. 2 shows testing pads 20 in the spaces between the die 12A, 12B, and 12C. Apparently, *Chia* places the testing pads in the spaces between the die so that the connection between the testing pads 20 and the bond pads 14 can be severed when the semiconductor wafer is scribed and broken after testing is complete.

Since *Chia* fails to disclose forming a test pad on a die, it does not disclose every element of claim 1 and the anticipation rejection is improper. Applicant respectfully requests that this rejection be withdrawn.

Claims 2-8 either directly or indirectly depend from independent claim 1. Therefore, Applicant submits claims 2-8 are also not anticipated by *Chia* at least for the same reasons as independent claim 1 in addition to their own respective features. Therefore, Applicant respectfully requests withdrawal of the rejections of claims 2-8.

Independent claim 9 as amended recites a die assembly formed on a wafer, the die assembly comprising a die formed on the wafer, said die having an active portion comprising integrated circuitry, at least one input bond pad formed on said active portion of said die, at least one test pad formed entirely on said die, and a conductive path that electrically couples said at least one input bond pad to said at least one test pad, wherein a portion of said conductive path is formed between an edge of said die and said active portion of said die. No new matter is added by the amendment because Figs. 2-6 as filed show the testing pads located entirely on the die.

Independent claim 9 includes the element of “a test pad formed entirely on said die”, a feature not disclosed by *Chia* as described above. Therefore, *Chia* fails to disclose every element of claim 9 and Applicant respectfully requests the Examiner to withdraw this rejection.

Claims 10-13 either directly or indirectly depend from independent claim 9. Therefore, Applicant submits claims 10-13 are also not anticipated by *Chia* at least for the same reasons as independent claim 9 in addition to their own respective features. Therefore, Applicant respectfully requests withdrawal of the rejections of claims 10-13.

Independent claim 14 as amended recites a method for preparing a die on a wafer for testing by a testing apparatus, the method comprising forming a die on a wafer, said die having an active portion comprising integrated circuitry, forming a plurality of input bond pads on said active portion, forming a plurality of test pads entirely on said die, said plurality of test pads accessible to the testing apparatus, at least one of said plurality of test pads corresponding to at least one of said plurality of input bond pads, forming a conductive path between said at least one of said plurality of test pads and said at least one of said plurality of input bond pads, wherein a portion of said conductive path is formed between an edge of said die and said active portion of said die, and testing said die by contacting said at least one of said plurality of test pads with the testing apparatus. No new matter is added by the amendment because Figs. 2-6 as filed show the testing pads located entirely on the die.

Independent claim 14 includes the element of “forming a plurality of test pads entirely on said die”, a feature not disclosed by *Chia* as described above. Therefore, *Chia* fails to disclose every element of claim 14 and Applicant respectfully requests the Examiner to withdraw this rejection as well.

Claims 15-20 either directly or indirectly depend from independent claim 14. Therefore, Applicant submits claims 15-20 are also not anticipated by *Chia* at least for the same reasons as independent claim 14 in addition to their own respective features. Therefore, Applicant respectfully requests withdrawal of the rejections of claims 15-20.

Independent claim 22 as amended recites a die comprising an active portion comprising integrated circuitry, a plurality of input bond pads formed on said active portion, a plurality of test pads formed entirely on said die, and a plurality of conductive lines, wherein each of said conductive lines is initially formed to electrically couple at least one of said plurality of input bond pads to at least one of said plurality of test pads, and wherein a portion of said each of said conductive lines is formed on an area between an edge of said die and said active portion of the die. No new matter is added by the amendment because Figs. 2-6 as filed show the testing pads located entirely on the die.

Independent claim 22 includes the element of “a plurality of test pads formed entirely on said die”, a feature not disclosed by *Chia* as described above. Therefore, *Chia* fails to disclose every element of claim 22 and Applicant respectfully requests the Examiner to withdraw this rejection as well.

Claims 23-26 either directly or indirectly depend from independent claim 14. Therefore, Applicant submits claims 23-26 are also not anticipated by *Chia* at least for the same reasons as independent claim 14 in addition to their own respective features. Therefore, Applicant respectfully requests withdrawal of the rejections of claims 23-26.

Independent claim 28 as originally presented recites a die comprising an active portion comprising integrated circuitry, a plurality of input bond pads formed on said active portion, a plurality of test pads formed on said die, a plurality of conductive lines, wherein each of said

conductive lines is initially formed to electrically couple at least one of said plurality of input bond pads to at least one of said plurality of test pads, and wherein a portion of said each of said conductive lines is formed on a scribe area outside the die.

Independent claim 28 includes the element of “a plurality of test pads formed on said die”, a feature not disclosed by *Chia* as described above. Therefore, *Chia* fails to disclose every element of claim 28 and Applicant respectfully requests the Examiner to withdraw this rejection as well.

2. Claims 21 and 27 Rejected Under 35 U.S.C. §103

The Examiner rejects claim 21 and 27 under 35 U.S.C. §103(a) as being obvious in view of *Chia*. To render a claim obvious, the reference or references must teach or suggest all the claimed limitations. *MPEP* §2142.

Claim 21 depends from claim 14 which includes the limitation of “forming a plurality of test pads entirely on said die”, a feature neither taught nor suggested by *Chia* as discussed above. Therefore, claim 21 is not obvious in view of *Chia* and Applicant respectfully requests that this rejection be withdrawn as well.

Claim 27 depends from claim 22 which now includes the limitation of “a plurality of test pads formed entirely on said die”, a feature neither taught nor suggested by *Chia* as discussed above. Therefore, claim 27 is also not obvious in view of *Chia* and Applicant respectfully requests that this rejection be withdrawn.

3. **The Amendments to Claims 9, 14, 15, and 22**

Applicant notes for the record that the Amendments for claims 9, 14, and 22 are submitted to more accurately define what Applicant believes is his invention. In that regard, Applicant states for the record that claims 9, 14, and 22 were believed to be patentable over *Chia* prior to the amendments submitted herewith and that these amendments are not made to overcome *Chia* or to address the Examiner's claim rejections. The amendments made to claim 15 are submitted to correct a grammatical error.

CONCLUSION

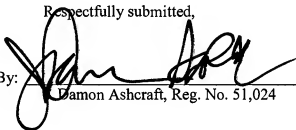
In view of the foregoing, Applicant respectfully submits that all claims now pending are in condition for allowance. A Notice of Allowance is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact Damon Ashcraft at 602-382-6389. Applicant authorizes and respectfully requests that any fees due be charged to Deposit Account No. 19-2814.

Date: _____

6/2/06

Respectfully submitted,

By: _____



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